

Proposed Amendments of 310 CMR 7.00: Air Pollution Control Regulations and 310 CMR 7.15: Asbestos

7.00: Air Pollution Control Regulations

[NOTE TO READERS: MassDEP is proposing to create a “Definitions” section in 310 CMR 7.15 for terms that pertain most directly to asbestos removal, and to move asbestos related terms from 310 CMR 7.00 into 310 CMR 7.15(1). MassDEP is also proposing to modify some terms that will remain in the Definitions section in 310 CMR 7.00, so they will not conflict with the definitions in 310 CMR 7.15(1).]

1. Delete the following definitions from 310 CMR 7.00:

~~ADEQUATELY WET means fixing or coating with water or water to which a surfactant has been added, or with a remover-encapsulant, so as to prevent a friable condition and visible emissions.~~

~~ASBESTOS means all asbestiform varieties of the mineral family called silicates including: serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, and actinolite-tremolite.~~

~~ASBESTOS-CONTAINING MATERIAL means friable asbestos and any material containing 1% or more asbestos by area as determined by a laboratory using USEPA approved methods. This term includes but is not limited to sprayed-on and troweled-on materials applied to ceilings, walls, and ceilings, walls, and other surfaces, insulation on pipes, boilers, tanks, ducts, and other equipment, structural and non-structural members, tiles, shingles or asbestos-containing paper.~~

~~ASBESTOS-CONTAINING WASTE MATERIAL means any friable asbestos-containing material removed during a demolition/renovation project and anything contaminated in the course of a demolition/renovation project including asbestos waste from control devices, bags or containers that previously contained asbestos, contaminated clothing, materials used to enclose the work area during the demolition/renovation operation, and demolition/renovation debris.~~

~~DEMOLITION/RENOVATION—Any operation which involves the wrecking, taking out, removal, stripping, or altering in any way (including repairing, restoring, drilling, cutting, sanding, sawing, scratching, scraping, or digging into) or construction of one or more facility components or facility component insulation. This term includes load and nonload supporting structural members of a facility.~~

~~FRIABLE means material that can be crumbled, pulverized or reduced to powder when dry, by hand pressure.~~

~~FRIABLE ASBESTOS-CONTAINING MATERIAL means any dry material containing 1% or more asbestos by area, as determined by a laboratory using USEPA approved methods, that hand pressure can crumble, pulverize, or reduce to powder.~~

2. Amend the following definitions in 310 CMR 7.00:

FACILITY means any installation or establishment and associated equipment, located on the same, adjacent or contiguous property, capable of emissions; ~~and for the purpose of 310 CMR 7.15, it means any structure, installation, building, equipment, or ship.~~

FACILITY COMPONENT means any part of a facility, including, but not limited to, any equipment, pipe, duct, boiler, tank, turbine, furnace, building material, structural or non-structural member at the facility.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) means those standards adopted by the U.S. Environmental Protection Agency and contained in the CFR Title 40, Part 61 as of [date of promulgation]; ~~and subsequent revisions as specified in the Regulations. Any emission testing to be compared with NESHAPS must be conducted in accordance with applicable procedures as specified in said CFR, Title 40, Part 61, or amendments thereto, or by another method which has been demonstrated to the satisfaction of the Department as being equivalent.~~

OWNER/OPERATOR means any person, any department or instrumentality of the federal government, or any public or private group which: a) has legal title, alone or with others, of a facility, b) has the care, charge, or control of a facility; ~~or c) has control of a demolition/renovation operation, including but not limited to contractors and subcontractors.~~

PERSON – means any individual, public or private partnership, association, firm, syndicate, company, trust, corporation, department or instrumentality of the federal or state government, political subdivision of the commonwealth, authority, bureau, agency, law enforcement agency, fire fighting agency, or any other entity recognized by law as the subject of rights and duties.

7.15: U Asbestos

(1) Definitions

[NOTE TO READERS: as noted above, MassDEP is proposing to create a new section in 310 CMR 7.15 for asbestos related definitions. The proposal includes moving some terms from the Definitions section in 310 CMR 7.00 into this new section, and also proposes to amend some of these terms. Definitions shown in plain text below would be moved from 310 CMR 7.00 without amendments. Definitions below with edits in redline/strikeout are proposed to be moved from 310 CMR 7.00 to this section and amended as shown. Finally, proposed definitions for new terms that have not been defined previously in 310 CMR 7.00 are entirely redlined.]

The definitions set forth at 310 CMR 7.00 apply to 310 CMR 7.15 unless otherwise defined in 310 CMR 7.15(1). The following words and phrases shall have the following meanings as they appear in 310 CMR 7.15. If a term is defined both in 310 CMR 7.00 and in 310 CMR 7.15(1), then the definition in 310 CMR 7.15(1) applies for purposes of 310 CMR 7.15:

ADEQUATELY WET means fixing or coating with water (or water to which a surfactant has

been added), amended water or with a remover-encapsulant, so as to prevent a friable condition and visible emissions.

AHERA - means the Asbestos Hazard Emergency Response Act, 15 U.S.C. 2646 *et seq.*, and the regulations promulgated thereunder, including 40 CFR Part 763.

Amended Water – means water to which a wetting agent has been added.

Asbestos means the asbestiform varieties of ~~the mineral family called silicates including:~~ serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite-(amosite), anthophyllite, and actinolite- tremolite-, and any other asbestiform minerals designated as asbestos by USEPA.

Asbestos Abatement Activity - means any activity which includes the removal, encapsulation, demolition, renovation, enclosure, repair, disturbance, handling, transportation, storage, or disposal of asbestos, asbestos-containing material, or asbestos-containing waste material, and any associated activity including but not limited to inspections, analysis and monitoring.

Asbestos Analytical Services – means services provided by a person certified by the Commonwealth pursuant to 453 CMR 6.08 which include, but are not limited to, the counting or enumeration of asbestos fibers in the air (air monitoring analysis) and the identification and quantification of asbestos in materials (bulk sample analysis) in connection with any asbestos hazard assessment, facility inventory, exposure measurement, abatement activity or associated activity.

Asbestos-Containing Material (“ACM”) -- means ~~friable asbestos and~~ any material containing 1% or more asbestos ~~by area~~ as determined by a laboratory using USEPA approved methods. This term includes but is not limited to sprayed-on and troweled-on materials applied to ceilings, walls, ~~and ceilings, walls,~~ and other surfaces, insulation on pipes, boilers, tanks, ducts, and other equipment, structural and non-structural members, tiles, ~~shingles~~ asphalt roofing or siding materials or asbestos-containing paper.

Asbestos-Containing Waste Material (“ACWM”) -- means any ~~friable~~-asbestos-containing material removed during a demolition/renovation project and anything contaminated in the course of a demolition/renovation project including but not limited to asbestos waste from control devices, bags or containers that previously contained asbestos, contaminated clothing, materials used to enclose the work area during the demolition/renovation operation, and demolition/renovation debris. This definition shall also include asbestos-containing material on and/or in facility components that are inoperable or have been taken out of service and any asbestos-containing material that is damaged or deteriorated to the point where it no longer is attached as originally applied and/or no longer is serving the intended purpose for which it was originally installed.

Asbestos Contractor – means any person who has a valid license issued by the Commonwealth pursuant to 453 CMR 6.05 for the purpose of entering into or engaging in asbestos abatement activity.

Asbestos Inspection Report – means a written report resulting from a thorough inspection using USEPA approved procedures and methods, or an alternate asbestos inspection method that has received prior written approval from the Department, to determine whether materials or structures to be worked on, renovated, removed or demolished (including materials on the outside of structures) contain asbestos.

Asbestos Inspector – means any person certified by the Commonwealth pursuant to 453 CMR 6.07 who identifies, assesses the condition of, or collects samples of asbestos-containing materials in connection with building or site assessments or inventories.

Asbestos Project Monitor – means any person certified by the Commonwealth pursuant to 453 CMR 6.07 who:

- (a) Collects air and bulk samples and performs visual inspections for the purpose of determining asbestos project completion;
- (b) Collects environmental asbestos air samples for the purpose of assessing present or future potential for exposure to airborne asbestos; or
- (c) Functions as the on-site representative of the facility owner or other persons by overseeing the activities of the asbestos contractor.

Asbestos Supervisor – means any person certified by the Commonwealth pursuant to 453 CMR 6.06 who has managerial or supervisory authority over asbestos workers.

Asbestos Worker – means any person certified by the Commonwealth pursuant to 453 CMR 6.06 who performs asbestos abatement activities under the direction and control of another, with or without compensation.

Bulk Loading – means the placement of unconfined asbestos-containing waste material in a vehicle or container, such as a roll-off, dumpster or truck in lieu of packaging the asbestos-containing waste material in individual leak tight containers.

Clearance Air Monitoring – means air monitoring conducted at the conclusion of an asbestos abatement activity which is used in combination with visual inspection to assess the adequacy of cleanup and project completion.

Containerize – means to place into sealed containers which will prevent leakage of solids, including dust, and liquids.

Debris – means any visually detectable residue, such as dust, dirt or other material that may or may not contain asbestos.

Demolition/Renovation – For the purpose of 310 CMR 7.15, means a~~A~~Any operation which involves the wrecking, taking out, removal, stripping, or altering in any way (including repairing, restoring, drilling, cutting, sanding, sawing, scratching, scraping, or digging into) or construction of one or more facility components or facility component insulation. This term includes load and nonload supporting structural members of a facility.

Disturbance -- means a physical disruption of the matrix of an asbestos-containing material which predisposes the material to release fibers or to generate asbestos-containing dust or debris.

Dumping Ground – For the purpose of 310 CMR 7.15, means a facility or place used for the disposal of asbestos-containing waste material from one or more sources which is not established or maintained pursuant to a valid site assignment or permit in accordance with M.G.L. c 111, § 150 A, 310 CMR 16.00 or 310 CMR 19.000.

Emergency Demolition/Renovation Operation -- means any operation that was not planned but results from a sudden unexpected event which requires the demolition/renovation of a structurally sound or unsound facility or facility component. This term includes operations necessitated by non-routine failures of equipment.

Encapsulation – means the application of a coating or liquid sealant to asbestos-containing material to reduce the tendency of the material to release fibers.

Enclosure – means the covering or wrapping of friable asbestos-containing material in, under or behind air-tight barriers.

Facility -- means any dumping ground, or any installation, structure, building or establishment, and associated equipment, located on the same, adjacent or contiguous property.

Facility Component – means any part of a facility, including, but not limited to, any equipment, pipe, duct, boiler, tank, turbine, furnace, building material, structural or non-structural member at the facility.

Friable -- means material that, when dry, can be crumbled, shattered, pulverized or reduced to powder when dry, by hand pressure or mechanical means such as, but not limited to, the use of excavators, bulldozers, heavy equipment, or power or hand tools.

Friable Asbestos-Containing Material (Friable ACM) -- means any asbestos-containing material, that, when dry, can be crumbled, shattered, pulverized or reduced to powder by hand pressure or mechanical means such as, but not limited to, the use of excavators, bulldozers, heavy equipment, or power and/or hand tools. ~~dry material containing 1% or more asbestos by area, as determined by a laboratory using USEPA approved methods, that hand pressure can crumble, pulverize, or reduce to powder.~~

Glove Bag – means a manufactured plastic bag-type of enclosure with built-in gloves, which is placed with an air-tight seal around a facility component which permits asbestos-containing material in or on the facility component to be removed without releasing asbestos fibers into the atmosphere.

HEPA Filtration – means high efficiency particulate air filtration capable of filtering 0.3 micron particles with 99.97% efficiency.

Inspection – means any activity undertaken at a facility for the purpose of determining the presence, location and/or condition of asbestos-containing material or material assumed to contain asbestos, whether by visual or physical examination, or by the collection of samples of such material. This term includes record keeping performed in connection with such asbestos inspection activities and re-inspection of friable and non-friable asbestos-containing material that has been previously identified, but does not include the following:

- (a) Periodic surveillance of the type described in 40 CFR Part 763.92(b) solely for the purpose of recording or reporting a change in the condition of known or assumed asbestos-containing material;
- (b) Inspections performed by employees or agents of federal, state or local government solely for the purpose of determining compliance with applicable statutes;
- (c) Visual inspections of the type described in 40 CFR Part 763.90(i) that are conducted solely for the purpose of determining completion of asbestos response actions; or
- (d) Sampling conducted by an employer or his or her agent immediately in advance of a work operation that would disturb a material of unknown asbestos content, where the sole purpose of the sampling is to determine potential worker or occupant exposure to asbestos.

Leak-Tight – means a condition under which solids, including dust, and liquids cannot escape or spill out.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

(NESHAPS) means those standards adopted by the U.S. Environmental Protection Agency and contained in the CFR Title 40, Part 61 as of [date of promulgation] ~~and subsequent revisions as specified in the Regulations. Any emission testing to be compared with NESHAPS must be conducted in accordance with applicable procedures as specified in said CFR, Title 40, Part 61, or amendments thereto, or by another method which has been demonstrated to the satisfaction of the Department as being equivalent.~~

Non-Friable – means material that, when dry, cannot be crumbled, shattered, pulverized or reduced to powder by hand pressure or mechanical means, such as, but not limited to, the use of excavators, bulldozers, heavy equipment, or power or hand tools.

Non-Friable Asbestos-Containing Material (Non-Friable ACM) – means any asbestos-containing material that, when dry, cannot be crumbled, shattered, pulverized or reduced to powder by hand pressure or mechanical means such as, but not limited to, the use of excavators, bulldozers, heavy equipment, or power or hand tools.

Operation and Maintenance Project or Work – means any asbestos abatement activity conducted in accordance with the applicable work practices set forth in 310 CMR 7.15 and which involves the removal or disturbance of:

- (a) 100 square feet or less of asbestos-containing floor tile, sheet floor coverings and asbestos-containing mastics and/or;
- (b) 32 square feet or less of asbestos-containing gypsum wallboard and/or joint compound.

OSHA – means the Occupational Safety and Health Administration of the United States

Department of Labor.

Owner-Occupied, Single-Family Residence – means any single unit building containing space for uses such as living, sleeping, preparation of food, and eating that is used by a single family which owns the property both prior to and after renovation or demolition. This term includes houses, mobile homes, trailers, detached garages, houseboats, and houses with a “mother-in-law apartment” or “guest room”. This term does not include rental property, multiple-family buildings, mixed use commercial/residential buildings or structures used for fire training exercises.

Owner/Operator -- means any person ~~who; any department or instrumentality of the federal government, or any public or private group which:~~

- a) has legal title, alone or with others, of a facility or dumping ground;
- b) has the care, charge, or control of a facility or dumping ground; or
- c) has control of an ~~demolition/renovation operation~~ asbestos abatement activity, including but not limited to contractors and subcontractors.

Sampling – means the process of obtaining representative portions of materials suspected of containing asbestos, including the taking of bulk portions of materials for analysis to determine composition, and the collection of air for the purposes of measuring the presence of asbestos.

Suspect Asbestos-Containing Material – means commercial products that have a reasonable likelihood of containing asbestos based upon their appearance, composition and use. This term includes, but is not limited to, all non-fiberglass insulation (e.g. pipe, boiler, duct work, etc.), cement/transite shingles, vinyl floor and wall tiles, vinyl sheet flooring, plaster, cement/transite pipes, cement sheets (corrugated and decorative), ceiling tiles, cloth vibration dampers or ductwork, spray-on fire proofing, mastic (flooring or cove base adhesive or damp proofing), and asphalt roofing or siding materials (shingles, roofing felts, tars, etc.).

Waste Shipment Record – means the shipping document, required to be originated and signed by the generator, used to track and substantiate the disposition of asbestos-containing waste material.

Work Area – means the area or location where any asbestos abatement activity or operations and maintenance work is being performed, including but not limited to: areas used for accessing the location where asbestos abatement, asbestos-associated project work or operations and maintenance work is being performed; areas used for the storage of equipment or removed materials; and such other areas of a facility or location that the Department determines to be hazardous to the health and safety of workers and the general public as a result of such asbestos work.

Work Practices – means the standards, procedures or actions for the removal, enclosure or encapsulation of asbestos, or for the demolition, renovation, maintenance or repair of facilities containing asbestos. This term also includes the minimum standards, procedures or actions to be implemented by persons engaged in inspection, analysis, risk assessment or other activities relating to asbestos work.

Working Days – means any day that the Massachusetts Department of Environmental Protection is open for business.

[NOTE TO REVIEWERS: MassDEP is proposing to strike the remainder of 310 CMR 7.15 and to replace it with the following text.]

(2) Applicability The provisions of 310 CMR 7.15 apply to all asbestos abatement activities.

(3) Prohibitions

- (a) No person shall violate or cause, suffer, allow or permit a person to violate any regulation set forth in 310 CMR 7.15, or cause, suffer, allow, or permit any asbestos abatement activity which causes or contributes to a condition of air pollution or which poses an actual or potential threat to human health, safety and welfare or to the environment. **[NOTE TO REVIEWERS: language similar to this provision is currently in 310 CMR 7.15(1)(a).]**
- (b) No person shall prevent access to asbestos-containing material for subsequent removal.
- (c) No person shall spray asbestos-containing material on any facility or facility component. **[NOTE TO REVIEWERS: language similar to this provision is currently in 310 CMR 7.15(1)(f).]**
- (d) No person shall apply an encapsulant to severely damaged or deteriorated asbestos-containing material.
- (e) No person shall install or reinstall asbestos-containing insulating material on a facility or facility component or install or reinstall a facility component that contains asbestos-containing insulating material. **[NOTE TO REVIEWERS: language similar to this provision is currently in 310 CMR 7.15(1)(g).]**
- (f) No person shall abandon or leave inoperable and/or out-of-service asbestos-containing facility components that are not in compliance with 310 CMR 7.15(3)(g) below and are located above ground and/or have been exposed by excavation on site.
- (g) Except as otherwise permitted by 310 CMR 7.15, no person shall fail to maintain asbestos-containing material in a facility in good condition, as originally applied and serving the intended purpose for which it was originally installed.
- (h) No person shall make, or cause any other person to make, any false, inaccurate, incomplete or misleading statement(s) in any notification or any other record or report submitted to or required by the Department pursuant to 310 CMR 7.09 or 310 CMR 7.15. Each owner/operator of a facility subject to any asbestos abatement activity shall notify the Department in writing immediately upon discovery of any false, inaccurate, incomplete or misleading statement(s) in any such notification or other record or report submitted to or required by the Department pursuant to 310 CMR 7.09 or 310 CMR 7.15.

(4) Provisions for Owners of Owner-Occupied, Single-Family Residences, 310 CMR 7.15(4)(a) through (e) shall only apply to Owners of Owner-Occupied, Single-Family Residences as that term is defined at 310 CMR 7.15(1). Owners of Owner-Occupied, Single-Family Residences are subject only to the provisions of 310 CMR 7.15 which are included and/or referenced in this Section. **[NOTE TO REVIEWERS: MassDEP is preparing guidance for homeowners that will provide easy-to-understand information on appropriate removal, handling, packaging, and disposal of asbestos containing material]**

that is likely to be generated by abatement activities conducted by homeowners in owner-occupied single family residences. MassDEP plans to work with local officials and retailers of building materials to make this guidance easily accessible.]

- (a) General Requirements. Prior to commencing a demolition/renovation operation in an Owner-Occupied, Single-Family Residence, the homeowner is responsible for determining whether any ACM will be disturbed by the operation, and if so whether the material is friable or non-friable.
- (b) Demolition/Renovation Involving Abatement of Friable ACM.
 - 1. Homeowners shall use a properly licensed asbestos abatement contractor for all abatement work involving friable ACM, as that term is defined at 310 CMR 7.15(1), including but not limited to, asbestos-containing pipe and boiler insulation.
 - 2. Homeowners shall ensure that all asbestos abatement activities involving friable ACM are conducted in accordance with all provisions of 310 CMR 7.15.
- (c) Demolition/Renovation Involving Abatement of Asbestos-Containing Cementitious Shingles, Siding or Panels.
 - 1. Homeowners may use a properly licensed abatement contractor to perform abatement activities involving asbestos-containing cementitious shingles, siding or panels; or
 - 2. Homeowners may perform abatement activities involving asbestos-containing cementitious shingles, siding or panels provided they maintain ownership of and continue to occupy the residence for at least six (6) months after completion of the asbestos abatement activity involving cementitious shingles, siding or panels.
 - 3. Homeowners who perform demolition/renovation involving abatement of asbestos-containing cementitious shingles, siding or panels, shall perform the abatement activities in accordance with the requirements of 310 CMR 7.15(13)(b) through (g) inclusive; and 310 CMR 7.15(18).
- (d) Demolition/Renovation Involving Abatement of Other Non-Friable ACM.
 - 1. Homeowners may use a properly licensed asbestos abatement contractor to perform abatement activities involving non-friable ACM.
 - 2. Homeowners may also perform asbestos abatement activities involving only non-friable ACM, as that term is defined at 310 CMR 7.15(1), provided they maintain ownership and continue to occupy the residence for at least six (6) months after completion of the non-friable asbestos abatement activity.
 - 3. Should abatement activities cause non-friable ACM to become friable, all applicable requirements of 310 CMR 7.15 pertaining to friable ACM shall apply.
- (e) Homeowner Notification Exemption. The owner of an Owner Occupied, Single-Family Residence who performs non-friable asbestos abatement activities in accordance with 310 CMR 7.15(4)(d)(2) and 310 CMR 7.15(4)(d)(3) shall not be subject to the notification requirements in 310 CMR 7.15(7) provided that the owner maintains ownership and continues to occupy the residence for at least six (6) months after completion of the non-friable asbestos abatement activity, and provided the abatement activity does not cause the non-friable ACM to become friable.

(5) Inspection Requirements Unless specifically exempted under 310 CMR 7.15(4)(c) or 310 CMR 7.15(4)(d), the owner/operator of a facility or facility component that contains suspect ACM shall, prior to conducting any demolition and/or renovation, employ or engage an asbestos inspector to thoroughly inspect the facility or facility component, or those parts thereof where the demolition and/or renovation will occur, to identify the presence, location and quantity of any asbestos-containing material and to prepare a written asbestos inspection report.

- (a) In addition to requirements in 40 CFR 763.85, 40 CFR 763.86 and 40 CFR 763.87, the written asbestos inspection report shall describe the demolition/renovation operation to be undertaken and identify the types, amounts, condition and locations of all asbestos-containing materials present. The written asbestos inspection report shall also include the following:
1. The date(s) of the inspection of the facility;
 2. The printed name, business address, business telephone number, certification number and signature of the asbestos inspector who conducted the inspection and prepared the report; and
 3. A description of the manner used to determine the sampling locations.
- (b) The written asbestos inspection report shall also contain an inventory of the exact locations of the materials from which samples were collected, the date(s) such samples were collected, the name(s) of the persons who provided asbestos analytical services, and a blueprint, site map, diagram or written description of the facility and area(s) thereof subject to demolition/renovation. This documentation shall clearly identify each location subject to demolition/renovation and the corresponding footage (square and/or linear) of any asbestos-containing material in each area.
- (c) Any material presumed or assumed to be asbestos-containing material need not be sampled and tested for the presence of asbestos, but such material shall be identified as such in the asbestos inspection report.
- (d) The owner/operator of a facility or facility component shall maintain a copy of the written asbestos inspection report available at the facility for review by the Department upon request at all times during the asbestos abatement activities and shall preserve and maintain such report at the facility for at least two years following the completion of said activities. In the event that the facility is demolished, the owner/operator shall preserve and maintain the written asbestos inspection report at its regular place of business.

(6) Removal Requirements The owner/operator of a facility or facility component shall:

- (a) remove and dispose of any asbestos-containing material and any presumed or assumed ACM, in accordance with 310 CMR 7.15, prior to conducting any demolition and/or renovation thereof [**NOTE TO REVIEWERS: language similar to this provision is currently in 310 CMR 7.15(1)(c)1.**]; and
- (b) remove or encapsulate any friable ACM and any presumed or assumed ACM that has been exposed as a result of any demolition/renovation, in accordance with 310 CMR 7.15(8).

(7) Notification Requirements [**NOTE TO REVIEWERS: notification requirements are currently in 310 CMR 7.15(1)(b).**]

Unless specifically exempted under the provisions of 310 CMR 7.15(4)(e), 310 CMR 7.15(7)(b)1, 310 CMR 7.15(7)(b)(2), 310 CMR 7.15(7)(b)(3), 310 CMR 7.15(7)(b)(4) and 310 CMR 7.15(14)(b), or if notification is being made under the terms of an approved facility blanket notification pursuant to 310 CMR 7.15(7)(b)8, the owner/operator of a facility or facility component shall notify the Department and obtain Department authorization prior to conducting any asbestos abatement activity. Each owner/operator shall ensure that a fully completed asbestos notification form, including any applicable fee, is received by the Department at least ten (10) working days prior to the commencement of the asbestos abatement activity. An asbestos notification form shall be deemed accepted by the Department unless the person submitting said asbestos notification form is notified in writing by the Department of deficiencies in the asbestos notification form within ten calendar days of the Department's receipt of said form. The Department's acceptance of said asbestos notification form shall constitute the Department's authorization for the asbestos abatement activity described in the asbestos notification form to be conducted in compliance with all applicable provisions of 310 CMR 7.15. The start date on the asbestos notification form shall encompass the time required for set-up of the area where such asbestos abatement activity will occur, including any pre-cleaning and installation of polyethylene sheeting required by 310 CMR 7.15(8)(b).

- (a) Delivery of the notification form by electronic filing shall be made at least ten working days prior to the commencement of the asbestos abatement activity.
- (b) Notification shall be made only by use of the Department approved asbestos notification form, and shall include all required information, be accompanied by the applicable fee, and be legible. An incomplete or illegible notification form will not be accepted and any asbestos abatement activity described therein will not be deemed authorized by the Department or in compliance with 310 CMR 7.15.

1. Notification Exemption for the Removal of Asbestos-Containing Asphaltic Roofing and Siding Materials: The removal or disturbance of asbestos-containing asphaltic roofing and siding materials shall not be subject to the notification requirements of this section provided that the applicable requirements of 310 CMR 7.15(11) are met.
2. Notification Exemption for Window Painting and/or Repair Work that Result in the Disturbance of Asbestos-Containing Glazing and Caulking Compounds: The removal or disturbance of asbestos-containing glazing and caulking compounds shall not be subject to the notification requirements of this section provided that the applicable requirements of 310 CMR 7.15(12) are met.
3. Notification Exemption for Exterior Asbestos-Containing Cementitious Shingles, Siding and Panels: The removal or disturbance of 100 square feet or less of exterior asbestos-containing cementitious shingles, siding and panels shall not be subject to the notification requirements of this section provided that the applicable requirements of 310 CMR 7.15(13) are met.
4. Notification Exemption for Asbestos Operations and Maintenance Projects: The removal or disturbance of asbestos-containing floor tile, sheet floor coverings and asbestos mastics or asbestos-containing gypsum wallboard/joint compound systems shall not be subject to the notification requirements of this section provided that the applicable requirements of 310 CMR 7.15(14) are met.

5. Notification Revision Procedures:
 - a. Notification date changes shall be made as follows:
 - i. The original start date on a notification form that has been submitted to and accepted by the Department in compliance with 310 CMR 7.15(7)(a) and (b) may be revised (i.e. moved forward or postponed), and asbestos abatement activity may start on said revised date provided that a revised notification form is received and accepted by the Department at least 10 working days prior to the new start date for the asbestos abatement activity and provided that the revision is properly submitted to and accepted by the Department prior to the start date for the asbestos abatement activity listed on the original notification form.
 - ii. If the asbestos abatement activity will end earlier than the end date listed on the original notification form, the Department must receive a revised notification form identifying the change no later than 24-hours prior to the revised end date for the activity.
 - iii. The asbestos abatement activity end date set forth in the original notification form may be extended to allow additional time to complete the specific asbestos abatement activity identified on the original notification. In such cases, the person who submitted the original notification form shall revise the original notification form and specify a new end date provided that the end date specified in the original notification form has not passed.
 - iv. If asbestos abatement activities are not continuous and will occur at intermittent times within the notified asbestos abatement work period identified on the notification form, the person who submitted the original notification shall inform the applicable Department regional office in writing, via fax, email or hand delivery, of the specific dates and times when the asbestos abatement activities will suspend and resume. The person who submitted the original notification form shall provide the Department with such notice a maximum of twenty four (24) hours following suspension of work and a minimum of twenty four (24) hours prior to resuming asbestos abatement activities.
6. Multiple Building Abatements - Separate notification forms shall be submitted to and accepted by the Department at least ten working days in advance of any asbestos abatement activity for each building and/or structure in which asbestos abatement activities will occur.
7. Waiver of the Advance Notification Period – The Department may approve a waiver of the ten working day advance notification period at the Department’s discretion in the event of emergency or unforeseeable circumstances as determined by the Department.

- a. Requests for approval of an advance notification waiver shall be made to the applicable Department regional office.
 - b. When approved by the Department, the waiver shall apply only to the ten (10) working day advance notification period. All other requirements of 310 CMR 7.15 shall continue to fully apply to asbestos abatement activities for which such notification waiver has been approved.
 - c. If the Department approves such a waiver, the person receiving the waiver shall provide notification regarding all asbestos abatement activities to the Department on the Department approved asbestos notification approval form (ANF 001) within 24-hours of commencement of the asbestos abatement activities, including set-up or on-site preparation activities.
8. Facility Blanket Notification
- a. An owner/operator may apply to the Department for approval of operations and maintenance projects involving asbestos-containing materials and/or large scale asbestos abatement projects that will be conducted at said facility over a twelve month period.
 - b. Blanket notification applications shall be submitted on Department approved forms, shall include all required information and any additional information requested by the Department, shall be accompanied by the appropriate fee, and shall be legible.
 - c. Blanket notification approvals may be granted for a period not to exceed twelve months at the Department's discretion and when granted the terms of the approval shall be facility specific.
 - d. The Department's receipt and acceptance of a blanket notification application shall not constitute approval thereof. The Department will issue a written approval or denial of the application..

(8) Specific Asbestos Abatement Work Practice Requirements [NOTE TO REVIEWERS: Asbestos Abatement Work Practice requirements are currently in 310 CMR 7.15(1)(c) and 7.15(1)(d).]

The owner/operator of a facility or facility component where any asbestos abatement activity is conducted shall ensure that the following work practice requirements are met, unless otherwise exempted under 310 CMR 7.15(4)(c) Provisions for Homeowners; 310 CMR 7.15(10) Requirements for Asbestos Glovebag Operations; 310 CMR 7.15(11) Requirements for the Removal of Asbestos-Containing Asphaltic Roofing and Siding Materials; 310 CMR 7.15(12) Requirements for Window Painting and/or Repair Work that Result in the Disturbance of Asbestos-Containing Glazing and Caulking Compounds; 310 CMR 7.15(13) Requirements for Exterior Asbestos-Containing Cementitious Shingles, Sidings and Panels; or 310 CMR 7.15(14) Work Practice Requirements for Asbestos Operations and Maintenance Projects.

- (a) Required Use of Licensed Asbestos Contractors. Except as allowed by 453 CMR 6.14(1)(a), only asbestos contractors licensed pursuant to 453 CMR 6.00 shall carry out asbestos abatement activities.
- (b) Work Area Preparation Requirements.

1. Exclusion of Persons from the Work Area. All persons not directly involved in the work operation shall be excluded from the work area.
2. Posting of Warning Signs. Warning signs meeting the specifications set forth in 29 CFR Part 1926.1101(k)(7) shall be posted at all approaches to the work area. Signs shall be posted a sufficient distance from the work area to permit a person to read the sign(s) and take precautionary measures to avoid exposure to asbestos.
3. Shutdown of HVAC Systems. The facility heating, ventilation and air-conditioning (HVAC) systems in the work area shall be shut down, locked out and isolated.
4. Removal of Moveable Objects. All moveable objects shall be removed from the work area prior to commencement of asbestos abatement work. Items to be reused which may have been contaminated with asbestos shall be decontaminated by HEPA vacuuming or wet cleaning prior to their being removed from the work area.
5. Covering of Non-Moveable Objects. All non-moveable or fixed objects remaining within the work area shall be wrapped or covered with six mil thick (minimum) plastic sheeting and completely sealed with duct tape or the equivalent.
6. Isolation of Work Area. The work area shall be isolated by sealing all openings, including but not limited to, windows, doors, ventilation openings, drains, grills, and grates with six mil thick (minimum) plastic sheeting and duct tape or the equivalent. For asbestos abatement activities defined at 310 CMR 7.15(1), large openings such as open doorways, elevator doors, and passageways shall be first sealed with solid construction materials, such as plywood over studding, which shall constitute the outermost boundary of the asbestos work area. All cracks, seams and openings in such solid construction materials shall be caulked or otherwise sealed, so as to prevent the movement of asbestos fibers out of the work area.
7. Covering of Floor, Ceiling and Wall Surfaces. Except as allowed by 453 CMR 6.14(4)(a)(8) a. through c., floor, ceiling and wall surfaces shall be covered with plastic sheeting. All seams and joints shall be sealed with duct tape or the equivalent. Floor covering shall consist of at least two layers of six mil thick plastic sheeting, with the edges up-turned to cover at least the bottom 12 inches of the adjoining wall(s). Ceiling covering shall consist of a minimum of two layers of four mil thick plastic sheeting. Wall covering shall consist of a minimum of two layers of four mil thick plastic sheeting. Wall covering shall extend from ceiling to floor and overlap the up-turned floor coverings without protruding onto the floor. Duct tape or the equivalent shall be used to seal the seams in the plastic sheeting at the wall-to-floor joints.
 - a. Exception to Covering Requirement Where Surfaces Are Impervious. Compliance with 453 CMR 6.14(4)(a)(8) is not required where floors and walls are covered by ceramic tile or other impervious materials that are free from holes, drains, cracks, fissures or other openings and which

may be thoroughly decontaminated by washing at the conclusion of the work, provided that such action does not result in the passage of asbestos fibers from the work area.

b. Exception to Covering Requirement for Abatement Surfaces.

Compliance with 453 CMR 6.14(4)(a)8 is not required for those floor, ceiling and wall surfaces from which asbestos coverings are removed.

c. Exception to Wall and Ceiling Surface Covering Requirement Where Glovebags are Used. Covering of wall and ceiling surfaces is optional for asbestos abatement activities where glovebags are used as the sole means of removal or repair, provided that the work area is isolated in accordance with 453 CMR 6.14(4)(a)(7), that all moveable objects in the work area are removed in accordance with 310 CMR 7.15 (8)(b)4, that immovable objects remaining in the work area are covered in accordance with 310 CMR 7.15(8)(b)5, and that all other relevant requirements of 310 CMR 7.15(8)(b) 1 - 6 are met. Where glovebags are used, the floor of the work area shall be covered with a minimum of one layer of six mil-thick plastic sheeting.

(c) Decontamination Facility Requirements.

1. Requirement for Use. Except as allowed by 453 CMR 6.14(4)(b)2, a three-compartment decontamination facility, as prescribed by OSHA Asbestos Regulations 29 CFR Part 1926.1101(j)(1), shall be used for decontamination. Except as may be required during emergencies which endanger life or health, the decontamination facility shall be the sole means through which the isolated work space is accessed and egressed while work is in progress.
2. Exception to Decontamination System Requirement for Work Less Than 25 Linear/Ten Square Feet. A change room may be used in lieu of the three-compartment decontamination facility specified by 453 CMR 6.14(4)(b)1 on projects which involve the disturbance of less than 25 linear feet of ACM on or in pipes, ducts or wires, and/or less than ten square feet of ACM on or in structures or components other than pipes, ducts or wires. Change rooms shall be constructed and operated in accordance with 29 CFR Part 1926.1101(j)(2).
3. Location of Decontamination Facilities. Whenever feasible, decontamination facilities shall be contiguous within the work area. Where this is not feasible, the decontamination facility shall be sited as close as possible to the work area.
4. Equipment Decontamination. No equipment, supplies, or materials (except properly containerized waste material) shall be removed from an asbestos work area unless such equipment, supplies or materials have been thoroughly cleaned and are free of asbestos debris. Where decontamination is not feasible, such materials shall be wrapped in a minimum of two layers of six-mil thick polyethylene sheeting with all joints, seams and overlaps sealed with duct tape or equivalent, or containerized in a metal, plastic or fiber drum with a locking lid. Said wrapped equipment, supplies or materials shall be labeled as being asbestos-contaminated prior to removal

from the work area. HEPA vacuums shall be emptied of contents prior to removal from the work area. Air filtration devices shall have used pre-filters removed and replaced with fresh filters prior to removal from the work area. Used HEPA filters and pre-filters shall be disposed of as asbestos-containing waste material (ACWM).

- (d) Requirements for Work Area Ventilation System. A HEPA-filtered work area ventilation system shall be used to maintain a reduced atmospheric pressure of at least -0.02 column inches of water pressure differential within the contained work area. The HEPA system shall be in operation at all times from the commencement of the asbestos project until the requirements of 310 CMR 7.15 (9) (Clearance Monitoring Requirements) and 453 CMR 6.14(5)(b) have been met. The ventilation equipment utilized shall be of sufficient capacity to provide a minimum of four air changes per hour and shall be equipped with an operating audible and visual alarm system capable of indicating the unit is working properly, and utilizing a clean filter specified for that unit and capable of filtering 0.3 micron particles with 99.97 % efficiency. The HEPA system units shall be operated in accordance with Appendix J of EPA Guidance Document EPA 560/5-85-024 and 29 CFR Part 1926.1101(g)(5)(i). Make-up air entering the work area shall pass through the HEPA system. Exhaust air shall be HEPA-filtered before being discharged outside of the work area. Exhaust air tubes or ducts associated with the work area ventilation system shall be free of leaks. Whenever feasible, exhaust air shall be discharged to the outside of the building. If access to the outside is not available, exhaust air may be discharged to an area within the building, but in no case shall exhaust air be discharged into any occupied areas of the building or into any areas of the building which contain exposed or damaged asbestos. When exhaust air is discharged to the interior of a building, the outflow shall be sampled and analyzed at least twice per day per HEPA machine using sampling and analysis methods prescribed by the NIOSH Analytical Method 7400 referenced at 40 CFR Part 763, Appendix A. If at any time fiber levels in the exhausted air exceed 0.01 fibers/cc, the asbestos abatement activity shall be stopped immediately, and the corresponding HEPA system(s) shall be shut off and repaired or replaced before any asbestos abatement activity is resumed.
1. Exception to Work Area Ventilation System Requirement where Glovebags are Used. Compliance with 453 CMR 6.14(4)(c) is not required for asbestos abatement activities where glovebags are used as the sole means of abatement removal or repair.
- (e) Removal and Cleanup Requirements. Removal of ACM from facility components shall be conducted within the work area at the site of origin as described in subsections 1- 5 below.
1. Wetting of Asbestos-Containing Material. Prior to removal, all ACM shall be thoroughly wetted with amended water. Amended water shall not be applied in amounts that will cause run-off or leakage of the water from the work area. Once removed, ACM shall be kept wet until and after it is placed into containers pursuant to 453 CMR 6.14(4)(d)2 and 310 CMR 7.15.
 2. Removal of Asbestos-Containing Material Being Removed As Units or in Sections. Facility component(s), covered or coated with ACM, being removed as units or in sections, shall be adequately wetted, carefully lowered to the floor level as units or sections and abated within the work area.

3. Containerization of Asbestos-Containing Waste Material. All asbestos-containing waste material and all debris contaminated with asbestos within the work area shall be promptly cleaned up and placed into leak-tight containers as described in subsections a - c below. Containerized ACWM shall be removed from the work area at least once per shift and stored in secured, totally enclosed vehicles or containers that are designed, constructed, and operated to prevent spills, leaks, or emissions in accordance with 310 CMR 7.15(16), 310 CMR 7.15(17), and 310 CMR 7.15(18),
 - a. ACM and ACWM not containing components with sharp edges shall be containerized in two plastic bags (six mil minimum thickness each bag, one inside the other) or in leak-proof metal, plastic or plastic lined drums with locking lids.
 - b. ACM and ACWM with sharp-edge components shall be contained in leak-proof metal, plastic or plastic-lined drums with locking lids or plastic lined boxes.
 - c. Large components removed intact shall be wrapped in a minimum of two layers of six mil thick polyethylene sheeting with all joints and seams sealed with duct tape or equivalent, and labeled as ACWM prior to removal from the contained work area.
4. Clean-up. Following an asbestos abatement activity, all contaminated surfaces within the work area shall be decontaminated using HEPA vacuuming or wet cleaning techniques. All equipment and materials used and all surfaces from which ACM has been removed shall be decontaminated. An inch of soil shall be removed from dirt floors and disposed of as asbestos waste. Clean-up shall be to the level of no visible debris.
5. Removal of work area barriers and work area ventilation systems. The conditions described in subsections a – d below shall be maintained until such time as the clearance monitoring requirements of 310 CMR 7.15(9) and 453 CMR 6.14(5) are met:
 - a. all work area barriers remain in place;
 - b. work area ventilation systems (if required) remain in operation;
 - c. respirators and other personal protective equipment continue to be worn; and
 - d. all other work practice requirements established by 310 CMR 7.15 and 453 CMR 6.14(4).

(9) Clearance Monitoring Requirements

In addition to the specific asbestos abatement work practice requirements set forth at 310 CMR 7.15(8), the following clearance monitoring procedures are required for all asbestos abatement activities except those specified in 310 CMR 7.15(9)(b) and shall be performed only by an asbestos project monitor.

- (a) Visual Inspections. An asbestos project monitor shall inspect all surfaces within the work area for visible debris. Should any visible debris be found in the work area, it shall be repeatedly cleaned by the asbestos contractor in accordance with 310 CMR 7.15 until there is no visible debris. Clearance air monitoring required by 310 CMR 7.15(9)(b) shall not be

conducted until an asbestos project monitor has documented that there is no visible debris remaining in the work area.

- (b) Clearance Air Monitoring. The clearance air monitoring requirements of 310 CMR 7.15 and 453 CMR 6.14 shall be met for all asbestos abatement activities, except those asbestos abatement activities conducted in facilities not subject to the requirements of AHERA where the glovebag is used as the sole means of removal or repair.

(10) Requirements for Asbestos Glovebag Operations

The owner/operator of a facility or facility component where asbestos abatement activities involving glovebag operations are conducted shall ensure that the following requirements are met:

- (a) Glovebags shall be used only on those facility components for which they are specifically designed and they shall not be modified for use on any other type of facility component. Glovebags shall be constructed of 6 mil-thick (minimum) plastic sheeting and be seamless at the bottom.
- (b) Glovebags shall be used only once and shall not be moved along the facility component from where they are initially applied.
- (c) Glovebags shall not be used to abate facility components hotter than 150 degrees Fahrenheit.
- (d) The work area shall be isolated in accordance with 453 CMR 6.14(4)(a)7 and 310 CMR 7.15 and cleaned of visible debris by wet wiping or HEPA vacuuming prior to installation of the glovebag.
- (e) Glovebags shall be installed so as to form an airtight covering around the facility components on which they are to be used. Any friable ACM in the immediate area of glovebag installation shall be wrapped and sealed in two layers of six-mil thick plastic sheeting or otherwise maintained intact prior to glovebag installation. Where points of attachment of the glovebag are not airtight, they shall be rendered airtight by wrapping with re-wettable fiberglass cloth, or an equivalent material, prior to attaching the glovebag. All openings in the glovebag shall be sealed against leakage with duct tape or the equivalent.
- (f) ACM shall be wetted with amended water prior to its removal and shall be maintained in a wet condition inside the glovebag.
- (g) Any ACM that has been exposed as a result of the glovebag operation shall be removed, encapsulated or enclosed so as to prevent the leakage of asbestos fibers prior to the removal of the glovebag.
- (h) All surfaces inside the glovebag from which ACM has been removed and the upper portions of the glovebag itself shall be cleaned free of visible debris prior to removal of the glovebag.
- (i) Debris shall be isolated in the bottom of the glovebag by twisting the bag so as to form a closure in the middle. This closure shall then be taped around with duct tape or the equivalent. Air in the glovebag shall be exhausted with a HEPA vacuum cleaner prior to its removal.
- (j) Following removal from the facility component, the glovebag and its contents shall be containerized in accordance with 453 CMR 6.14(4)(d)2 and disposed of in accordance with 453 CMR 6.14(4)(h), 310 CMR 7.15 and 310 CMR 19.000.

(11) Requirements for the Removal of Asbestos-Containing Asphaltic Roofing and Siding Materials

- (a) Any person who carries out the removal of asbestos-containing asphaltic roofing and siding materials shall be trained in accordance with 453 CMR 6.00 and all applicable refresher training requirements at 453 CMR 6.00.
- (b) Asphaltic shingles and felts shall be removed intact to the greatest extent feasible.
- (c) Roof level heating and ventilation air intakes shall be isolated by covering the intakes with 6 mil thickness plastic sheeting prior to the start of the removal work.
- (d) Asphaltic shingles and felts that are not intact, or will be rendered non-intact shall be adequately wet during removal, unless such wetting will create safety hazards.
- (e) Where cutting machines are used in the removal of asphaltic shingles and felts, said cutting machines shall be continually misted during use, unless such misting is infeasible or will create safety hazards.
- (f) Dust produced by power roof cutters operating on aggregate surfaces shall be removed by HEPA vacuuming. Dust produced by power roof cutters operating on non-aggregate, smooth surfaces shall be removed by HEPA vacuuming or wet wiping along the cut line.
- (g) Asbestos-containing shingles or felts shall not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it shall be lowered to the ground by crane or hoist or transferred in dust-tight chutes.
- (h) Intact asphaltic shingles and felts shall be lowered to the ground prior to the end of each work shift. Non-intact asphaltic shingles and felts shall be kept wet at all times while on the roof, unless such procedure will create safety hazards. Non-intact asphaltic shingles and felts shall be placed in an impermeable waste bag (six-mil thickness) or wrapped in plastic sheeting (minimum six-mil thickness), sealed with duct tape or the equivalent and lowered to the ground prior to the end of each work shift.

(12) Requirements for Window Painting and/or Repair Work that Result in the Disturbance of Asbestos-Containing Glazing and/or Caulking Compounds

- (a) Any person who carries out the removal of asbestos-containing window glazing and caulking compounds shall be trained in accordance with 453 CMR 6.00 and all applicable refresher training requirements at 453 CMR 6.00.
- (b) A work area defined at 310 CMR 7.15(1) shall be established that extends outward from the exterior side of the building or facility where the window painting and/or repair work that will result in disturbance of asbestos-containing glazing and/or caulking compounds is to take place. Said work area shall be large enough to encompass all areas where dust, debris or waste generated during the operation are expected to accumulate and areas where there is a reasonable possibility that airborne levels of asbestos could be elevated, as well as any area occupied by equipment.
- (c) Barrier tape and asbestos warning signs conforming to 29 CFR Part 1926.1101(k)(7) shall be placed around the perimeter of the regulated work area to demarcate it. Warning signs shall also be placed on the basket of the scissors lift (where used).
- (d) Only those persons directly involved in the work operation shall be allowed access to the work area.
- (e) Windows, doors and other openings on the side of the building where the window repair/painting work that will result in disturbance of asbestos-containing glazing and/or caulking compounds is occurring shall be closed while the work is occurring and air conditioners on the same side of the building shall be turned off.

- (f) Tarpaulin or plastic sheeting shall be spread on the ground under the window(s) being painted or repaired. Said tarpaulin or plastic sheeting shall extend away from the edge of the building and to either side of the work area a sufficient distance to catch any debris generated by the work operation. Tarpaulin or sheeting shall be cleaned of accumulated debris no later than the end of each work shift.
- (g) If the entire sash is to be removed during painting or repair operations, window openings shall be sealed on the inside of the building with 6 mil thickness polyethylene sheeting in a manner sufficient to prevent leakage of dust or debris to interior spaces. Where less than an entire sash is to be replaced, covering and sealing of interior surfaces of the sash that encompasses the area of the panes being worked on may be performed in lieu of sealing the entire sash.
- (h) Prior to commencing removal or repair of asbestos-containing glazing compound or caulk, the exterior and interior window well and sash areas shall be pre-cleaned by HEPA-vacuuming and/or wet wiping.
- (i) Asbestos-containing glazing compound and caulk shall be wet with amended water prior to removal or repair. All pieces or particles of glazing compound and caulk shall be removed using a HEPA vacuum and/or using a wet wipe collection method.
- (j) The work area, including ground covers and equipment, shall be cleaned of visible debris at the end of each workday.
- (k) Upon completion of the removal of the asbestos-containing glazing compound and/or caulk, the sash and sill areas shall again be cleaned by HEPA-vacuuming and/or wiped with a wet sponge or cloth. Polyethylene sheeting (where used) shall be removed from the interior of the window and disposed of as asbestos-containing waste, and the window well shall be cleaned by HEPA-vacuuming and/or wet wiping.
- (l) All equipment utilized in the work operation shall be cleaned of visible dust and debris by HEPA-vacuuming and/or wet wiping prior to removal from the work area. Wet wipes shall be managed as asbestos-containing waste.
- (m) The tarpaulin or plastic sheeting below the window(s) shall be cleaned of visible dust and debris by HEPA-vacuuming and/or wet wiping. Dry sweeping shall not be allowed. Ground covers that are free of visible debris and dust may be re-used or disposed as regular solid waste.
- (n) Barrier tape may be disposed as regular solid waste.
- (o) If disposable protective clothing is used, it shall be disposed as asbestos waste. If reusable protective clothing is used, it shall be HEPA-vacuumed and/or wet wiped prior to removal and handled according to OSHA requirements set forth at 29 CFR Part 1926.1101(i) and (j).
- (p) Wetted window caulking and glazing and other ACM shall be collected and sealed into a 6-mil plastic bag that is placed in a leak-tight container for proper disposal.
- (q) If entire sash is to be removed and disposed of as ACWM, then wetted sash shall be removed intact, wrapped in a minimum of two layers of 6-mil thick polyethylene sheeting with all joints and seams sealed with duct tape.
- (r) At the conclusion of the work, the work site shall be inspected for paint dust or chip debris and asbestos-containing glazing compound or caulk. The work area shall be re-cleaned until no such debris is found.
- (s) All waste shall be labeled as ACWM prior to removal from the work area.

- (t) Visual clearance of the work area required by (r) above shall be conducted by a person who has completed the asbestos operations and maintenance projects worker training specified in 453 CMR 6.00.

(13) Requirements for Exterior Asbestos-Containing Cementitious Shingles, Siding and Panels

- (a) Any person who carries out the removal of asbestos-containing cementitious shingles, siding and panels shall be trained in accordance with 453 CMR 6.00 and all applicable refresher training requirements of 453 CMR 6.00.
- (b) Tarpaulin or plastic sheeting shall be spread on the ground under the areas where the shingles, siding or panels are being removed. Said tarpaulin or plastic sheeting shall extend away from the edge of the building and to either side of the work area a sufficient distance to catch any debris generated by the work operation. Tarpaulin or sheeting shall be cleaned of accumulated debris no later than the end of each work shift.
- (c) Openings on the side of the building where the asbestos abatement activities are taking place shall be closed or sealed with polyethylene sheeting and duct taped in a manner sufficient to prevent leakage of dust or debris to interior spaces.
- (d) Nails securing shingles shall be cut or pulled to allow intact shingle removal. Cementitious asbestos-containing shingles, siding and panels shall be removed whole and intact to the greatest extent feasible. Methods likely to break shingles, siding or panels during removal shall not be used.
- (e) Each panel, siding or shingle shall be thoroughly wetted with amended water prior to removal.
- (f) Shingles, siding or panels shall be carefully lowered to the ground in a manner to avoid breakage.
- (g) Removed shingles, siding or panels and associated debris shall be containerized in leak-proof metal, plastic or plastic-lined drums or boxes or wrapped with double thickness plastic sheeting (6-mil minimum thickness each layer) sealed with duct tape no later than the end of each work shift.

(14) Work Practice Requirements for Asbestos Operation and Maintenance Projects or Work

The owner/operator of a facility or facility component where an operation and maintenance project or work is conducted, as defined by 310 CMR 7.15(1), involving the removal or disturbance of asbestos-containing floor tile, sheet floor covering, or asbestos-containing gypsum wallboard/joint compound systems shall ensure that the following general work practice requirements are met.

- (a) Training Requirements. Any person who carries out asbestos operations and maintenance projects shall be trained in accordance with 453 CMR 6.00 and all applicable refresher training requirements of 453 CMR 6.00.
- (b) Notification Requirements. Asbestos operation and maintenance projects which are conducted in accordance with the work practices set forth at 310 CMR 7.15(14) shall be exempt from the notification requirements of 310 CMR 7.15(7).
- (c) General Work Practice Requirements for operation and maintenance projects or work.

1. All persons not directly involved in the work shall be excluded from the work area for the duration of the project by physical barriers or other appropriate means.
2. Barriers shall be constructed, as necessary, to insure that asbestos-containing dust released during work activities is contained within the work area. Glove bags, HEPA-shrouded tools and mini-enclosures are permitted in lieu of constructed barriers.
3. ACM shall be wetted with amended water before it is disturbed, and it shall be kept wet throughout the asbestos abatement activities until containerized in accordance with 310 CMR 7.15(8)(e)(3).
4. Where ACM is being removed, it shall be removed in an intact state to the greatest extent feasible.
5. Where power tools are used to cut, chip or abrade an ACM, said power tools shall be equipped with HEPA-filtered local exhaust attachments specifically manufactured for the tools being used.
6. Any friable ACM exposed as a result of the asbestos abatement activities shall be removed or, if in suitable condition, encapsulated.
7. HEPA vacuuming or wet cleaning shall be used to decontaminate the work area and any equipment used in the work operation until all surfaces are free of visible debris. The use of compressed air or dry-sweeping is prohibited.
8. HEPA vacuums shall be emptied and decontaminated in accordance with 453 CMR 6.00.
9. Clearance Inspections. All surfaces within the work area shall be visually inspected for dust, debris and other particulates residue by persons trained pursuant to 453 CMR 6.00. The work area shall be repeatedly cleaned until there is no visible debris.

(d) Requirements for the Removal of Asbestos Floor Tile, Sheet Floor Coverings as Operations and Maintenance Projects or Work. Any person conducting an operation and maintenance project or work involving the removal of floor tile, sheet floor coverings and mastics shall presume that said materials contain asbestos unless the results from an asbestos bulk analysis or manufacturer's specifications indicate otherwise.

1. General Requirements:
 - a. Asbestos floor tile, sheet floor coverings and mastics being removed shall not be sanded, dry-swept, dry-scraped, drilled, sawed, abrasive-blasted, mechanically chipped or pulverized during said removal work.
 - b. All furniture and other movable objects shall be removed from the work area before removal begins. All non-movable objects in the work area shall be wrapped or covered with four-mil (minimum) plastic sheeting. Plastic sheet coverings shall be completely sealed with duct tape or the equivalent.
 - c. The entire floor surface from which asbestos floor tile or sheet floor coverings are to be removed shall be vacuumed with a HEPA vacuum prior to removal of the floor tile or coverings.
2. Specific Requirements for Removal of Asbestos Floor Tile.
 - a. Floor tiles shall be wetted with amended water prior to removal and kept wet throughout the removal process.

- b. Floor tiles shall be individually removed by prying upward with hand scrapers or similar hand-held tools in a manner which minimizes breakage. Removal with spud-bars, ice scrapers or similar implements is prohibited. Where tiles do not readily release from underlying mastic, the removal tool may be struck with a hammer to facilitate release. Floor tiles shall be removed in an intact state to the extent feasible.
 - c. Tile surfaces may be heated with a heat gun or other heat source to soften the adhesive and facilitate tile removal. Where heat is used to facilitate removal, the wetting of tile specified in Section 310 CMR 7.15(14)(d)(2)a above may be delayed until after release of the tile from the floor surface.
 - d. Removed floor tiles and ACWM within the work area shall be promptly cleaned up and containerized while still wet. Containerized ACM shall be removed from the work area at least once each working shift. Waste not containing components with sharp edges shall be containerized in two plastic bags (six mil minimum thickness each bag, one inside the other) or in metal, plastic or fiber drums with locking lids. Floor tile with sharp edges and sharp-edged components likely to puncture the plastic bags specified above shall be contained in leak-proof metal, plastic or plastic lined drums or boxes.
 - e. Following containerization of floor tile and associated debris, the floor surface shall be HEPA-vacuumed while still wet and then allowed to dry.
 - f. Immediately after drying, the floor surface shall be HEPA-vacuumed again before the visual inspection required by 310 CMR 7.15(9)(a) and 453 CMR 6.00 is performed.
3. Specific Requirements for Removal of Sheet Asbestos Flooring.
- a. Where it is necessary to cut sheet asbestos flooring to facilitate handling, the flooring shall be cut with a knife. Tearing or sawing of sheet asbestos flooring as a method of removal is prohibited.
 - b. Where sheet asbestos flooring adheres to the floor surface, points of adhesion shall be continually misted or sprayed with amended water as these points are separated during the removal process. Hand scrapers or similar hand tools may be used to facilitate release of the sheet flooring from the underlying surface.
 - c. Removed sheet flooring and ACWM within the work area shall be promptly cleaned up and placed into leak-tight containers while still wet. Containerized ACM shall be removed from the work area at least once each working shift. Waste not having sharp-edged components shall be containerized in two plastic bags (six mil minimum thickness each bag, one inside the other) or in metal, plastic or plastic lined drums or boxes. Removed material or debris with sharp edges and sharp-edged components likely to puncture the plastic bags specified above shall be contained in leak-proof metal, plastic or plastic lined drums or boxes.

- d. Following containerization of sheet floor covering and associated debris, the floor surface shall be HEPA-vacuumed while still wet and then allowed to dry.
 - e. Immediately after drying, the floor surface shall be HEPA-vacuumed again before visual inspection required by 310 CMR 7.15(9)(a) and 453 CMR 6.00 is performed.
- (e) Specific Requirements for the Removal or Repair of Asbestos-Containing Gypsum Wallboard and/or Joint Compound. Any person conducting an operation and maintenance project or work involving the removal of gypsum wallboard and/or joint compound shall presume that said materials contain asbestos unless the results from an asbestos bulk analysis or manufacturer's specifications indicate otherwise.
 - 1. Where removal of sections of gypsum wallboard and/or joint compound is required, said sections shall be removed intact to the greatest extent feasible.
 - 2. Where gypsum wallboard and/or joint compound must be cut to allow removal or refitting of sections, only the minimum number of cuts necessary to accomplish said removal or refitting shall be permitted.
 - 3. Manually-operated tools or power tools fitted with HEPA-filtered vacuum attachments shall be used for the cutting or resurfacing of asbestos-containing gypsum wallboard and/or joint compound.
 - 4. Where manually-operated tools are used for the cutting or resurfacing of gypsum wallboard and/or joint compound, the area being cut shall be continually misted with amended water during the cutting operation.
 - 5. Dry sanding of asbestos-containing gypsum wallboard and/or joint compound during refinishing operations is prohibited; only wet sanding is permitted.
 - 6. Where holes of one-half inch or less in diameter are to be drilled through asbestos gypsum wallboard and/or joint compound, the area encompassing the hole shall be covered with a sufficient quantity of shaving foam to catch the generated chips and dust. Where holes of greater than one-half inch are to be drilled, the area being drilled shall be continually misted with amended water during the drilling operation.

(15) Alternative Asbestos Abatement Work Practice Approvals

In the event circumstances and situations occur that result in the need to deviate from section(s) of 310 CMR 7.15, a person may apply to the Department for an Alternative Asbestos Abatement Work Practice Approval. Such circumstances and situations include, but are not limited to, emergencies involving structurally unsound buildings, fire damaged structures, and non-emergencies, such as asbestos abatement activities in areas in close proximity to high voltage electrical conveyance equipment and bulk loading of asbestos contaminated debris.

- (a) Any person applying for an Alternative Asbestos Abatement Work Practice Approval shall submit an application to the Department on a Department approved form. The application shall include:
 - 1. a description of the need and justification for each requirement of 310 CMR 7.15 for which a deviation is sought;
 - 2. a description of each alternative work practice proposed;

3. a demonstration that the deviations from 310 CMR 7.15 and alternatives proposed will not pose significant risk to public health, safety or the environment;
4. all required information specified in the application form; and
5. any additional information requested by the Department.

The application shall be accompanied by the applicable fee, and shall be legible. An incomplete or illegible application will not be accepted or approved and shall not constitute compliance with these regulations.

- (b) Alternative Asbestos Abatement Work Practice Approvals may be granted at the Department's discretion, and if granted shall be site/situation specific and shall be nontransferable.
- (c) The Department in its sole discretion may grant Alternative Asbestos Abatement Work Practice Approvals, to the extent and for the duration of time during which the Department is persuaded that the activities allowed by the approval will not pose a significant risk to public health safety or the environment.

(16) Asbestos-Containing Waste Material Packaging Requirements [NOTE TO REVIEWERS: waste disposal requirements are currently in 310 CMR 7.15(1)(e)1.]

The owner/operator of a facility or facility component where any asbestos abatement activity is conducted shall comply with the following:

- (a) Adequately wet ACWM obtained from air cleaning equipment or from removal operations.
- (b) While wet, containerize and seal the ACWM in leak-tight containers.
- (c) Label the containers using warning labels specified by Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(i)(2) or 1962.58(k)(2)(iii). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.
- (d) In addition to the warning label requirement specified in section (c) above, each individual container and/or package of ACWM shall be labeled prior to being transported off the site of generation with the name of the waste generator, the location at which the waste was generated, and the date of generation.
- (e) Use of alternative waste packaging methods is permitted only if the Department has granted prior written approval.
- (f) Bulk-loading of ACWM is not permitted without the Department's prior approval of an Alternative Asbestos Abatement Work Practice Application.

(17) Asbestos-Containing Waste Material Transport Requirements

- (a) All ACWM shall be containerized pursuant to 310 CMR 7.15(16) prior to being transported.
- (b) All ACWM shall be transported in totally enclosed vehicles or containers that are designed, constructed, and operated to prevent spills, leaks, or emissions.
- (c) All ACWM shall be transported in conformance with EPA NESHAP Regulations at 40 CFR Part 61 and applicable US Department of Transportation, OSHA and state and local regulations.

(18) Asbestos-Containing Waste Material Storage and Disposal Requirements [NOTE TO REVIEWERS: waste storage and disposal requirements are currently in 310 CMR 7.15(1)(e)2 and 7.15(1)(e)3.]

- (a) The owner/operator of a facility or facility component where any asbestos abatement activity is conducted shall ensure that all ACWM generated from any asbestos abatement activity is properly disposed of at a landfill approved to accept such material. If within Massachusetts, such sites must be operated in accordance with 310 CMR 19.000. If outside Massachusetts, such sites must be operated in accordance with applicable state and federal asbestos and/or landfill laws and regulations of the receiving state.
- (b) ACWM shall be stored only at:
 - 1. A location that is an approved refuse transfer station facility permitted in accordance with 310 CMR 19.061: Special Waste to manage ACWM; and/or
 - 2. The site of generation of the ACWM while the asbestos abatement activity is on-going and for up to thirty (30) calendar days after completion of the asbestos abatement activity and the clearance monitoring requirements of 310 CMR 7.15(9) and 453 CMR 6.14(5) are met.
- (c) No person shall dispose of ACWM at a location that is not a landfill approved to accept such material. If within Massachusetts, such sites must be operated in accordance with 310 CMR 19.000. If outside Massachusetts, such sites must be operated in accordance with applicable state and federal asbestos and/or landfill laws and regulations of the receiving state.

(19) Waste Shipment Records and Reports

- (a) All asbestos-containing waste material shall be shipped via asbestos waste shipment records on a Department approved form that includes, but is not limited to, the following information:
 - 1. The name, address and telephone number of the owner and operator of the facility or dumping ground where asbestos abatement activities have occurred;
 - 2. The quantity and type (friable or non-friable) of the asbestos-containing waste material in cubic meters (cubic yards) and a description of the container used for shipment;
 - 3. The name, address and telephone number of the person who conducted any asbestos abatement activity;
 - 4. The name and telephone number of the disposal site operator;
 - 5. The name and physical location of the disposal site;
 - 6. The date transported;
 - 7. The name, address, and telephone number of the transporter(s);
 - 8. Certification by the owner or operator of the facility or dumping ground where asbestos abatement activities have occurred/where asbestos waste was generated that the contents of each shipment have been characterized, packaged, marked and labeled in accordance with 310 CMR 7.15;
 - 9. Signature of each transporter confirming the contents of each shipment are in all respects in the proper condition for transport according to applicable international, federal, state and local regulations;
 - 10. Signature by the receiving disposal facility confirming that i) the quantity of asbestos-containing waste material listed on the waste shipment record is the same as the quantity accepted for disposal and ii) it holds appropriate permits and/or authorizations to accept for disposal asbestos-containing waste material described on waste shipment records; and

11. Such other information as the Department requires therein.
- (b) If a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the owner or operator of the facility or dumping ground where asbestos abatement activities have occurred/where the asbestos-containing waste was generated within 35 days of the date the waste leaves the site of origin, the owner or operator of the facility or dumping ground where the asbestos abatement activities have occurred and/or where the asbestos-containing waste material was generated shall contact the transporter and/or operator of the designated disposal site to determine the status of the waste shipment.
 - (c) The owner or operator of the facility or dumping ground where the asbestos abatement activities have occurred and/or where the asbestos-containing waste material was generated shall report, in writing, to the Department if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the owner or operator of the facility or dumping ground where the asbestos abatement activities have occurred and/or where the asbestos-containing waste was generated within 45 days of the date the waste was accepted by the initial transporter. The report shall include the following information:
 - 1. A copy of the waste shipment record for which a confirmation of delivery was not received: and
 - 2. A cover letter signed by the owner or operator of the facility or dumping ground explaining the efforts taken to locate the asbestos waste shipment records in accordance with 310 CMR 7.15. Compliance with the foregoing reporting requirements shall not be construed to relieve the owner or operator of the facility or dumping ground of the obligation to maintain waste shipment records in accordance with 310 CMR 7.15.
 - (d) The owner/operator of the facility or dumping ground where the asbestos abatement activities have occurred and/or where the asbestos-containing waste was generated shall report, in writing, to the Department if the waste shipment record is modified after the date the waste is accepted by the initial transporter. The report shall include a description of the amendment or modification together with copies of the waste shipment record before and after amendment or modification.
 - (e) The owner/operator of the facility or dumping ground where the asbestos abatement activities have occurred and/or where the asbestos-containing waste was generated, the transporter, and the owner/operator of the designated waste disposal site shall retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years. All such parties shall furnish upon request, and make available for inspection by Department personnel, all records required under this section.

(20) General Enforcement Provisions [NOTE TO REVIEWERS: enforcement language is currently in 310 CMR 7.15(2).]

In addition to the Department's enforcement authority under M.G.L. c.111 §§142A-M, M.G.L. c. 21A §16 and other applicable laws and regulations, the provisions of 310 CMR 7.15 are subject to the enforcement provisions of 310 CMR 7.52.